

SAP Cloud Infrastructure Services (North America) Service Terms

1. DEFINITIONS

“Failover Event” refers to the necessary activity and components used to stand up Customer’s recovery environment to resume operation.

“Managed VMs” refers to the SAP database virtual machines (VMs) and application server VMs identified in the Order and managed by Sungard AS for Customer.

“Primary Site” is the Sungard AS site in which a Managed VM was provisioned originally and, while not under Failover Event, is the location in which the Managed VM resides.

“RPO” is the recovery point objective, which is the age of the files or data in backup storage required to resume normal operations if a computer system or network failure occurs.

“RTO” is the recovery time objective, which is the maximum acceptable amount of time since the last data recovery point.

“Secondary Site” is the Sungard AS site to which the Managed VMs will be relocated in the Failover Event.

2. SAP CLOUD INFRASTRUCTURE SERVICES

2.1. Features (HANA and Non-HANA)

Sungard AS will provide the following in connection with the number of SAP database virtual machines (VMs) and application server VMs (“Managed VMs”) identified in the Order:

- (a) The quantity of virtual central processing unit (vCPU), random-access memory (RAM) (including HANA RAM) and storage, each as identified in the Order
- (b) Initial OS builds and subsequent OS configuration changes upon Customer request
- (c) OS problem resolution and incident management
- (d) Monitoring of infrastructure and OS availability and thresholds, and Customer notification if Sungard AS detects non-responsiveness or exceeded thresholds, excluding monitoring of virtual private network (VPN) persistence
- (e) Ownership of system administration security access (e.g., root or administrator access)
- (f) Initial storage configuration and subsequent storage management for Managed VMs
- (g) Initial SAP database backup configuration with standard SAP database backup definitions
- (h) Network configuration change/add/deletes per Customer request
- (i) Administration of as many as 10 Active Directory and/or LDAP accounts
- (j) Redundant firewall infrastructure, configuration, implementation, configuration changes, patch management and installation, availability monitoring, five site-to-site VPN tunnels, creation of backup and restore firewall rules, incident management and problem resolution (Customer system administration access to firewall and load balancing infrastructure is not permitted)
- (k) Up to five internal virtual local-area networks (VLANs) (not including VLANs provided with services such as Internet or AS Connect Plus)
- (l) Monitoring is conducted at 5-minute intervals, where:
 - i. Customer notification is triggered by two consecutive negative polling responses
 - ii. Monitoring detects only positive or negative ICMP/SNMP responses from direct network interface card (NIC) polling and does not detect SNMP traps, and monitored devices may generate false-positive alerts that are caused by network congestion or application activity
 - iii. The monitoring components of the Services may require a monitoring agent be installed on the OS where Customer will install the agent and vendor-required upgrades or updates, unless the OS is managed by Sungard AS

- iv. In the event more than one instance or partition of an OS or application is running on a monitored device, the Sungard AS monitoring “unit” is per-instance instead of per-VM

2.2. General (HANA and Non-HANA)

For all Managed VMs, Customer will:

- (a) Provide ongoing SAP database backup configuration support
- (b) Initiate system-level file and/or database restores
- (c) Perform SAP system level recovery from a backup
- (d) Manage all SAP printer spoolers, output requests, media handling and port clearing (OS-level SAP print spoolers are not permitted)
- (e) Provide verification of licenses and the necessary license keys that are applicable to Customer-provided software prior to Service provision by Sungard AS
- (f) Obtain and maintain 24x7 maintenance agreements for Customer-provided software and notify the vendor of Sungard AS’ authorization to act as Customer’s agent under the maintenance agreements
- (g) Be responsible for software management and configuration of Customer-managed VPN site-to-site end points (Sungard AS does not monitor VPN persistence)

3. MANAGED SAP SECONDARY SITE FAILOVER SERVICES

3.1. Features (HANA and Non-HANA)

Sungard AS will provide the following in connection with the number of Secondary Site VMs identified in the Order:

- (a) Restoration of Primary Site Managed VMs to a Secondary Site if the Primary Site becomes unavailable in Sungard AS’ sole reasonable discretion
- (b) One Customer-executed failover test of the Secondary Site per 12-month period following the Order Start Date

3.2. General (HANA and Non-HANA)

Following a Failover Event, Sungard AS will notify Customer when the Primary Site is available and schedule with Customer the transfer of Customer data and applications back to the Primary Site no later than fourteen (14) days following Customer’s receipt of the Sungard AS notice of availability.

Customer tests of the Failover Services must be scheduled at least thirty (30) days in advance.

4. SAP CLOUD INFRASTRUCTURE SERVICES (HANA and Non-HANA)

4.1. Service-Level Agreements (SLAs)

4.1.1. Target

The service performance target for SAP Cloud Infrastructure Services Managed VMs contracted by Customer with Sungard AS is that they will be operational and available to Customer 99.95% of the time during each calendar month. A Managed VM is deemed available based on its ability to process programmatic functions at the VM level.

4.1.2. Measurement

Sungard AS Managed VM availability will be measured using Sungard-AS-provided monitoring software and/or processes. The availability percentage is calculated as follows:

The denominator of the calculation is the total number of hours in a calendar month, minus the total amount of hours used during any preventive maintenance scheduled by Sungard AS or any Customer-requested downtime and any time attributable to the events specified in [Service Level Agreements, General](#).

The numerator is the total number of hours in a month, minus the total amount of hours used during any preventive maintenance scheduled by Sungard AS or any Customer-requested downtime, any time attributable to the events specified in [Service Level Agreements, General](#) and any other downtime.

The resulting fraction (multiplied by 100) is the percentage of actual Sungard AS Managed VM availability. The Sungard AS equipment may, at times, be working, despite the measurement showing it to be unavailable and, in this case, it will be deemed available if the Sungard AS Managed VM is able to process programmatic functions.

4.1.3. Remedy

If Sungard AS fails to meet this SLA, Customer is entitled to a credit equal to the percentages identified below for each month in which the failure occurred:

Availability Percentage and Service Credits (% of pro rata portion of the Order's Monthly Fee based on VMs affected):

≥99.5% and <99.95% = Service Credit of 10%

≥99.0% and <99.5% = Service Credit of 20%

<99% = Service Credit of 30%

5. SAP CLOUD SECONDARY SITE FAILOVER SERVICES (HANA AND NON-HANA)

5.1. Service-Level Agreements

5.1.1. Target

The service performance target for SAP Cloud Infrastructure Services Secondary Site VMs contracted by Customer with Sungard AS for which Customer has conducted a failover test within the previous 12 months, is that they will meet a 60-minute recovery point objective (RPO) and 1-hour VM-level recovery time objective (RTO), when using the SAP Secondary Site Failover Services to transfer the applicable Managed VMs to the Secondary Site.

5.1.2. Measurement

The Sungard AS secondary site VM RTO is measured from the time of Sungard AS' determination of the need for a Failover Event until the Secondary Site VMs are restored and available for SAP application recovery. The Sungard AS Secondary Site VM RPO is measured as the differential data recovery point as indicated in the VMware reporting for each individually recovered VM.

5.1.3. Remedy

If Sungard AS fails to meet the SAP Secondary Site Failover Services SLA, Customer is entitled to a credit equal to the percentages identified below for each failure occurrence:

RPO or RTO actual time in hours and Service Credits (% of Order's Secondary Site Failover Monthly Fee for the affected VMs)

RPO between 60 and 90 minutes and/or RTO between 4 and 6 hours = 30% Service Credit

RPO between 90 and 120 minutes and/or RTO between 60 and 12 hours = 50% Service Credit

RPO greater than 120 minutes and/or RTO greater than 12 hours = 100% Service Credit

6. GENERAL TERMS AND CONDITIONS

Sungard AS' standard daily backup window begins at 6PM in the time zone in which the protected servers are located and ends at 6AM in the same time zone on the following day. Sungard AS cannot guarantee that backups will be completed within the scheduled backup window(s) or that data restoration will occur within a defined time period as both are dependent on the quantity of data to transfer and network bandwidth availability.

Cloud Services do not include support for configurations or architectures that are not supported or recommended by the applicable vendor.

Database licenses are provided by Customer unless included in the Order under Software Licensing Services.

Sungard AS does not guarantee a time to fix Customer-provided software. Sungard AS will engage and manage vendors in accordance with the terms of the underlying maintenance agreement and is not responsible for vendor failures.

Sungard AS will provide technical support, problem resolution and change management for VMs receiving Cloud OS Managed Solutions in accordance with its Support and Infrastructure Guide located in the Customer Portal.

Upon the expiration/cancellation of the Order for any reason, Customer will delete or migrate all Customer data resident on Sungard AS systems or equipment. To the extent that Customer fails to do so, Sungard AS will delete all such Customer data and software.

6.1. Service-Level Agreements; General

All the above clauses pertaining to Service-Level Agreements (SLA) targets and remedies shall be read subject to this section.

If during the Term, Sungard AS fails to meet any of the SLA targets, Customer shall be entitled (as its sole and exclusive remedy in relation to such failure) to the applicable credits specified above. Sungard AS shall only be obliged to apply credits where specifically requested by Customer. In no event shall Sungard AS be obliged to provide any refund in relation to any credit, but rather the credit shall be applied to the next following invoice due to Customer. Any credit entitlement that is not requested by Customer in writing within one (1) month of its availability shall no longer be available and Customer will be deemed to have waived any rights in relation thereto and (for the avoidance of doubt) Sungard AS' failure to meet the relevant SLA.

Where the fees payable in relation to a particular Service are bundled with the fees payable for other Services, or the fees payable in relation to specific items of Equipment are bundled with those for other Equipment, and Customer becomes entitled to a service credit, then in calculating that credit, the applicable fee shall be the fee that Sungard AS would have charged for the individual Service, or item of Equipment, to which the service credit relates, had it not been bundled with other Services or other Equipment (as the case may be).

In no event shall the total aggregate credits to be applied by Sungard AS in any calendar year exceed Customer's then-current total monthly proportion of the annual fees payable for all of the Services provided under the Order.

Notwithstanding anything herein, Sungard AS shall not be responsible for failure to carry out any of its obligations in relation to Network Services to the extent that the failure is caused by:

- (a) A breach of the Network Services Service Terms or the Order by Customer
- (b) Failure of Customer to provide any assistance, where required, in accordance with the Network Services Service Terms or the Order
- (c) Negligent or wilful acts or omissions of Customer or its employees, contractors or agents

- (d) Malfunction of Equipment or other infrastructure at the Delivery Location (unless such malfunction was caused by Sungard AS' failure to maintain Sungard AS Equipment or infrastructure in accordance with the Network Services Service Terms or the Order, unless such Equipment or other infrastructure at the Delivery Location was to be Resilient)
- (e) Scheduled maintenance, upgrades, repairs or component replacements or scheduled backups or other mutually-agreed-to downtime (unless these occurred to equipment, software or infrastructure that was to be Resilient)

7. GENERAL SERVICE TERMS

These Services are also subject to the General Service Terms at

<https://www.sungardas.com/hubfs/multimedia/document-file/sungardas-general-service-terms.pdf>.